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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/410,044	10/01/1999	ROLAND BODIN	040020-149	6306

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EXAMINER

SEAL, JAMES

ART UNIT PAPER NUMBER

2131

DATE MAILED: 10/03/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/410,044

Applicant(s)

BODIN, ROLAND

Examiner

James Seal

Art Unit

2131

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 January 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. This Action is in response to applicant's correspondence of 23 January 2001.
2. IDS has been considered and a signed copy is enclosed.
3. Amendment to specification pages 1, 2, 3, 4, 5, and 8 have been entered.
4. Claims 1-4 have been cancelled without prejudice.
5. Amended claim 5 is pending.

Specification

6. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. Examiner suggests "Modified Key Generation for a TDMA Mobile Network"
7. The disclosure is objected to because of the following informalities: Page 3 lines 7-12 make mention of claims 1-5 which have either been cancelled or would be renumbered if allowed. Examiner suggest either canceling this paragraph or redirect discussion to claim 5 which would be renumbered as claim 1 if allowed.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 5 rejected under 35 U.S.C. 103(a) as being unpatentable over Tan (US 4502137), and further in view of Kage (US 4791669).

10. Claims 1-4 are cancelled

11. As per claim 5, a method for transmitting information between a plurality of users (Abstract) on a network (Figure 2) using time division frames further divided into a plurality of blocks using a multiple access system (that is a multiplexing technique in which a channel is dividing among different users allocating to each of them a time slot in a repeating cycle, TDMA, See Figure 2, Abstract), each station on the communication net being computer or phone (Column 3, line 36). Tan is silent on limitation of applying his invention to wireless phones, and to the use on encryption of individual blocks.

12. The limitation of encrypting information using a pseudo-random number from an encryption key (Figure 1, $x_1 x_2 x_3, \dots x_n$; and key variable in Kage see column 3, lines 39-40) with input of the frame number (element 15 Figure 1) forming a modified pseudorandom sequence Y from these inputs (element 13, Figure 1) and XORing the results into the signal (element 10, Figure 1). One of ordinary skill in the art desiring to extend Tan's multiblock system per frame to wireless phone, would have recognized the need for security (as most users are concerned about the security of their data when it goes out over the air) and would have applied Kage concept of generating a modified pseudo random sequence to encrypt provide sufficient random sequence data to encrypt the plurality of blocks per frame in the Tan system. Claim 5 is rejected.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Seal whose telephone number is 703 308 4562. The examiner can normally be reached on M-F, 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gail Hayes can be reached on 703 305 9711. The fax phone numbers for the organization where this application or proceeding is assigned are 703 746 7239 for regular communications and 703 746 7240 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 308 3900.

Jws
September 30, 2002


GAIL HAYES
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100